

Isolators VHF & UHF



DrawCom Ferrite Isolators provide further isolation between the transmitters in a combiner system, in particular giving extra protection against the generation of intermodulation products in the PA stage of a transmitter. Where higher levels of isolation are required, DrawCom dual ferrite isolators provide up to 60dB isolation with a broader bandwidth.

- 30dB isolation (typical)
- Low insertion loss
- Low VSWR
- Power ratings to 300W
- Narrowband or Broadband
- Reverse power detection available

Typical Specifications

Bandwidth	2% from Centre Frequency
Isolation	typical 30 dB, minimum 20 dB
Insertion Loss	0.3 dB Typically
VSWR	1.2:1
Forward Power	10, 25, 50
Temperature	-10 to +55°C
Connectors	N Type as standard. BNC or SMA optional

Selection Guide

Part No.	Frequency	Forward Power
08-004006	60-140 MHz	10W
08-004007	140-330 MHz	
08-004008	330-470 MHz	
08-004903	60-140 MHz	25W
08-004904	140-330 MHz	
08-004905	330-470 MHz	
08-005003	60-140 MHz	50W
08-005004	140-330 MHz	
08-005005	330-470 MHz	

Isolators: 0.8 - 8.0 GHz



An RF isolator is a two-port passive device made of magnets and ferrite material that is used to protect other RF components from excessive signal reflection.

DrawCom offers both RF isolators & circulators available in N & SMA-Female connectors in the most “popular” frequency bands between 0.8 - 8.0 GHz.

Selection Guide

Part No.	Connector Style	Frequency (GHz)	Insertion Loss (Max)	VSWR (Max)	Isolation (Min) (dB)	Operating Case Temperature (°C)
IS-0.900	SMA-Female	0.8-1.0	0.4	1.25:1	20	-20 to +65
IN-0.900	N-Female	0.8-1.0	0.4	1.25:1	20	-20 to +65
IS-1.950	SMA-Female	1.7-2.2	0.4	1.25:1	20	-20 to +65
IN-1.950	N-Female	1.7-2.2	0.4	1.25:1	20	-20 to +65
IS-2.500	SMA-Female	2.3-2.7	0.4	1.25:1	20	-20 to +65
IN-2.500	N-Female	2.3-2.7	0.4	1.25:1	20	-20 to +65
IS-3.000	SMA-Female	2.0-4.0	0.6	1.35:1	17	0 to +65
IN-3.000	N-Female	2.0-4.0	0.6	1.35:1	17	0 to +65
IS-6.000	SMA-Female	4.0-8.0	0.5	1.30:1	18.5	-10 to +65
IN-6.000	N-Female	4.0-8.0	0.5	1.30:1	18.5	-10 to +65

Notes:

1. Isolators are designed with an internal 10W load capability. Consult DrawCom for application information.
2. Higher Isolator power levels can be achieved utilizing our circulators with an external load. DrawCom carries an extensive selection of high power loads.
3. Isolation performance contingent on a VSWR of 1.05:1 Max. on terminated ports.
4. Circulator power rated into a load mismatch of 1.05:1 all phase angles.
5. Additional frequency ranges available, please consult with factory for specific ranges.
6. Heat sink temperature must not exceed the maximum operating temperature specified.

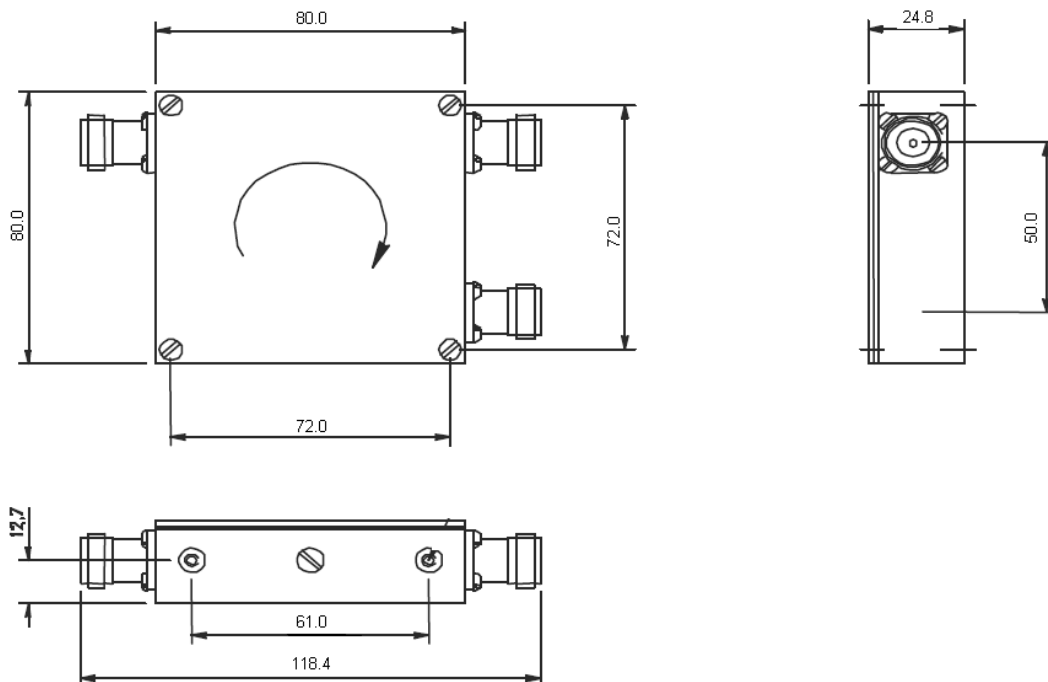
Circulators: VHF & UHF



Being a three port device, DrawCom 3-port isolators can be used as a circulator. They provide further isolation between the transmitters in a combiner system, in particular giving extra protection against the generation of intermodulation products in the PA stage of a transmitter.

- 30dB isolation (typical)
- Low insertion loss
- Low VSWR
- Power ratings to 300W
- Narrowband or Broadband
- Reverse power detection available

Typical Specifications		
Frequency Range	60-150 MHz	Part No. 08-004012
	150-300 MHz	Part No. 08-004013
	300-470 MHz	Part No. 08-004014
Bandwidth	2% from Centre Frequency	
Isolation (dB)	typical 30, minimum 20	
Insertion Loss	0.3 dB Typically	
VSWR	1.3:1	
Forward Power	250 Watts	
Temperature	-10 to +55°C	
Connectors	N Type as standard. BNC or SMA optional	



Circulators: 0.8 - 8.0 GHz



An RF circulator is a three-port passive device used to control the direction of signal flow in a circuit. DrawCom offers both RF isolators & circulators available in N & SMA-Female connectors in the most “popular” frequency bands between 0.8 - 8.0 GHz.

Selection Guide

Part No.	Connector Style	Frequency (GHz)	Insertion Loss (Max)	VSWR (Max)	Isolation (Min) (dB)	Power (Watts) Average	Operating Case Temp (°C)
CS-0.900	SMA-Female	0.8-1.0	0.4	1.25:1	20	250	-20 to +65
CN-0.900	N-Female	0.8-1.0	0.4	1.25:1	20	250	-20 to +65
CS-1.950	SMA-Female	1.7-2.2	0.4	1.25:1	20	150	-20 to +65
CN-1.950	N-Female	1.7-2.2	0.4	1.25:1	20	150	-20 to +65
CS-2.500	SMA-Female	2.3-2.7	0.4	1.25:1	20	150	-20 to +65
CN-2.500	N-Female	2.3-2.7	0.4	1.25:1	20	150	-20 to +65
CS-3.000	SMA-Female	2.0-4.0	0.6	1.35:1	17	25	0 to +65
CN-3.000	N-Female	2.0-4.0	0.6	1.35:1	17	25	0 to +65
CS-6.000	SMA-Female	4.0-8.0	0.5	1.30:1	18.5	2	-10 to +65
CN-6.000	N-Female	4.0-8.0	0.5	1.30:1	18.5	2	-10 to +65

Notes:

1. Isolation performance contingent on a VSWR of 1.05:1 Max. on terminated ports.
2. Circulator power rated into a load mismatch of 1.05:1 all phase angles.
3. Additional frequency ranges available, please consult with factory for specific ranges.
4. Heat sink temperature must not exceed the maximum operating temperature specified.